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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,127	03/24/2004	Scott C. Glasgow	SHA01 P-361	4520
277 7590 04/10/2007 PRICE HENEVELD COOPER DEWITT & LITTON, LLP 695 KENMOOR, S.E. P O BOX 2567 GRAND RAPIDS, MI 49501			EXAMINER BLANKENSHIP, GREGORY A	
			ART UNIT	PAPER NUMBER
			3612	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/10/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/808,127	<b>Applicant(s)</b> GLASGOW ET AL.	
	<b>Examiner</b> Greg Blankenship	<b>Art Unit</b> 3612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-48 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/24/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/3/06</u> . | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-8, 10, 11, 13, 14, 16-23, 25, 26, 28, 29, 31-39, 41, 42, 44, 45, 47, and 48 are rejected under 35 U.S.C. 102(b) as being anticipated by Chou et al. (6,179,355).

Chou et al. disclose, in reference to claims 1, 17, and 32, a longitudinal beam (18) that has a front face (24), a first side wall (32), and a second side wall (36). The side walls (32,36) have U-shaped sections (34,38) that are spaced from the front face (24). The side walls (32,36) roll to enlarge the U-shaped sections (34,38) as seen in Figures 4A-4D. In reference to claims 2, 17, and 33, an energy absorber (20) is located adjacent the front face (24). In reference to claim 17, Figure 3 shows mounts (50) that engage the rear of the beam (18) for connection to the vehicle. In reference to claims 3, 4, 18, 19, and 35, the beam (18) is made of a front beam portion and a back beam portion (40), as shown in Figure 2A, that are integral. In reference to claims 5 and 20, Figure 2A shows the front beam portion and the back beam portion having uniform thickness. In reference to claims 6, 21, and 37, the front face and the sidewalls (32,36) are formed on the front beam portion, as shown in Figure 2B. In reference to claims 3, 7, 8, 18, 22, 23, 38, and 39, a rear beam portion (48) is attached to the front beam (18) by mechanical fasteners, as shown in Figure 3. In reference to claims 10, 11, 25, 26, 41, and 42, Figure 3 shows the front beam portion (18) has a pair of flanges. The rear beam portion has flanges that are crimped over the flanges of the front beam

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portion. In reference to claims 13, 28, and 44, the front beam portion (18) is made from a different material than the rear beam portion (48). In reference to claims 14, 29, and 45, the rear beam portion has legs that overlap the sidewalls of the front beam portion (18). In reference to claims 16, 31, and 47, the U-shaped sections extend outwardly. In reference to claim 48, the first and the second U-shaped section (34,38) have mouth openings in directions substantially perpendicular to a longitudinal direction of the beam. Figure 2A shows the mouths to the first and second U-shaped sections (34,38) opening in the vertical direction that is perpendicular to the longitudinal direction of the beam.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 9, 12, 24, 27, 40, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chou et al. (6,179,355) in view of Goto et al. (6,726,261).

Chou et al. do not disclose the front and rear beam portions welded together.

Goto et al. teach attaching beam portions (1,3) by welding, as disclosed on lines 21 and 22 of column 6.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to weld the front and rear beam portions of Chou et al., as taught by Goto et al., provide the desired strength and rigidity.

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5. Claims 15, 30, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chou et al. (6,179,355) in view of Mooijman et al. (7,044,515).

Chou et al. do not disclose the claimed ribs.

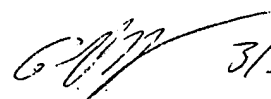
Mooijman et al. teach a plurality of ribs on walls (18,20) to reinforce and stiffen the walls.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a plurality of ribs to both the first side wall and the second side wall of Chou et al, as taught by Mooijman et al., to reinforce and stiffen the first and second side walls to tune the energy absorbing characteristics of the energy management system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Blankenship whose telephone number is 571-272-6656.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Dayoan can be reached on 571-272-6659. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

 3/30/2007  
GREGORY J. BLANKENSHIP  
PATENT EXAMINER